CLAIMS

What is claimed is:

- 1 1. A method of generating a user interface, the method comprising the steps
- 2 of:
- 3 receiving a television signal;
- 4 displaying images on a display device based on the television signal;
- 5 determining whether secondary information associated with the
- 6 television signal is available; and
- 7 if secondary information associated with the television signal is
- 8 available, displaying a notification on the display device as the images are
- 9 being displayed.
- 1 2. A method according to claim 1, wherein the secondary information
- 2 associated with the television signal comprises data for generating an
- 3 interactive user interface.
- 1 3. A method according to claim 2, wherein the secondary information
- 2 comprises hypertext data associated with the television signal.
- 1 4. A method according to claim 3, wherein the hypertext data represents data
- 2 retrieved on a wide area network.
- 1 5. A method according to claim 3, wherein the step of displaying a
- 2 notification comprises the step of displaying an animated character.

- 1 6. A method according to claim 5, wherein the hypertext data comprises
- 2 hypertext links corresponding to World Wide Web page.
- 1 7. A method of enabling a client processing system to generate a user
- 2 interface, the method comprising the step of transmitting sequences of
- 3 instructions from a host processing system to the client processing system, the
- 4 sequences of instructions including instructions which, when executed on the
- 5 client processing system, cause the client processing system to perform the
- 6 method recited in claim 1.
- 1 8. A method of generating a user interface, the method comprising the steps
- 2 of:
- 3 receiving a television signal;
- displaying video images on a display device;
- 5 detecting a predetermined event;
- 6 in response to detecting the predetermined event, displaying an
- 7 animated character on the display device as a notification of the event as the
- 8 video images are being displayed.
- 1 9. A method according to claim 8, wherein the step of detecting a
- 2 predetermined event comprises the step of determining when a user-
- 3 specified event has occurred.

- 1 10. A method according to claim 8, wherein the step of detecting a
- 2 predetermined event comprises the step of detecting the end of a television
- 3 advertisement.
- 1 11. A method according to claim 8, wherein the step of detecting a
- 2 predetermined event comprises the step of determining whether secondary
- 3 information associated with the television signal is available, wherein the
- 4 secondary information includes hypertext data associated with a current
- 5 content of the television signal.
- 1 12. A method according to claim 11, wherein the predetermined content
- 2 comprises data for generating an interactive user interface.
- 1 13. A method according to claim 11, wherein the predetermined content
- 2 comprises hypertext data corresponding to data originating from a computer
- 3 network.
- 1 14. A method according to claim 13, wherein the hypertext data comprises
- 2 data representing a World Wide Web page.
- 1 15. A method of enabling a client processing system to generate a user
- 2 interface, the method comprising the step of transmitting sequences of
- 3 instructions from a host processing system to the client processing system, the
- 4 sequences of instructions including instructions which, when executed on the

- 5 client processing system, cause the client processing system to perform the
- 6 method recited in claim 8.
- 1 16. A processing system for connection to a television set, the television set
- 2 having a display device, the processing system comprising:
- 3 a processor;
- a receiver coupled to the processor for receiving a television signal; and
- a memory coupled to the processor, the memory having stored therein
- 6 sequences of instructions for configuring the processor to:
- 7 cause video images on the display device based on the television
- 8 signal;
- 9 detect a predetermined event; and
- display an animated character on the display device in response
- 11 to detecting the predetermined event as the video images are being displayed.
 - 1 17. A processing system according to claim 16, wherein the event comprises a
 - 2 user-specified event.
 - 1 18. A processing system according to claim 16, wherein the event comprises
 - 2 an end of a television advertisement.
 - 1 19. A processing system according to claim 16, wherein the event comprises
 - 2 the availability of secondary information associated with the television
 - 3 signal, wherein the secondary information includes hypertext data associated
 - 4 with a current content of the television signal.

- 1 20. A processing system according to claim 19, wherein the predetermined
- 2 content comprises data for generating an interactive user interface.
- 1 21. A processing system according to claim 19, wherein the predetermined
- 2 content comprises hypertext data corresponding to data originating from a
- 3 computer network.
- 1 22. A processing system according to claim 21, wherein the hypertext data
- 2 comprises data representing a World Wide Web page.
- 1 23. A method of generating a user interface in a processing system
- 2 connectable to a display device, the method comprising the steps of:
- displaying an input window on the display device, the input window
- 4 including a plurality of icons located substantially adjacent to each other
- 5 along a coordinate axis;
- 6 in response to a user input selecting one of the icons:
- 7 redisplaying the input window, such that at least one of the
- 8 icons appears to be shifted in position along the coordinate axis; and
- 9 displaying information corresponding to the selected icon
- 10 adjacent to the selected icon along the coordinate axis.
 - 1 24. A method according to claim 23, wherein all of the plurality of icons
 - 2 remain visible during the step of displaying information corresponding to the
 - 3 selected icon.

1	25. A method according to claim 23, further comprising the steps of:
2	determining when the selected icon is no longer selected;
3	when the selected icon is no longer selected:
4	ceasing to display the information corresponding to the icon in
5	the space adjacent to the icon; and
6	redisplaying the input window, such that such that the plurality
7	of icons are displayed substantially adjacent to each other.
1	26. A method according to claim 23, further comprising the step of displaying
2	full-motion video images on the display device, wherein the step of
3	displaying the input window comprises the step of displaying the input
4	window over only a portion of the video images.

- 1 27. A method according to claim 26, wherein the video images include real-
- 2 time television images.
- 1 28. A method according to claim 27, further comprising the step of receiving
- 2 hypertext data transmitted from a remote processing system.
- 1 29. A method according to claim 23, further comprising the step of receiving
- 2 a user input selecting one of the icons, the user input having been entered by
- 3 a user from a remote input device.

- 1 30. A method of enabling a client processing system to generate a user
- 2 interface, the method comprising the step of transmitting sequences of
- 3 instructions from a host processing system to the client processing system, the
- 4 sequences of instructions including instructions which, when executed on the
- 5 client processing system, cause the client processing system to perform the
- 6 method recited in claim 23.
- 1 31. A method of generating a user interface in a client processing system
- 2 connectable to a television set, the television set having a display device, the
- 3 display device having a display area, the method comprising the steps of:
- 4 displaying a menu window within only a portion of the display device,
- 5 the menu window including a plurality of icons located adjacent to each
- 6 other, each of the icons representing a different function selectable by a user;
- 7 in response to receiving a user input selecting one of the icons:
- 8 redisplaying at least one of the icons in the menu window, such
- 9 that said at least one of the icons appear to be shifted in position, to provide a
- 10 space adjacent to the selected icon; and
- displaying a description of the function represented by the
- 12 selected icon in the space, wherein all of the plurality of icons remain visible
- 13 while the description is displayed.
 - 1 32. A method according to claim 31, further comprising the step of displaying
- 2 video images on the display device, wherein the menu window is
- 3 superimposed over at least a portion of the video images.

- 1 33. A method according to claim 32, wherein the video images include real-
- 2 time television images.
- 1 34. A method according to claim 33, further comprising the step of receiving
- 2 hypertext data transmitted from a remote processing system.
- 1 35. A method according to claim 31, further comprising the step of receiving
- 2 a user input selecting one of the icons, the user input having been entered by
- 3 a user from a remote input device.
- 1 36. A method of enabling a client processing system to generate a user
- 2 interface, the method comprising the step of transmitting sequences of
- 3 instructions from a host processing system to the client processing system, the
- 4 sequences of instructions including instructions which, when executed on the
- 5 client processing system, cause the client processing system to perform the
- 6 method recited in claim 31.
- 1 37. In a first processing system connected to communicate with a second,
- 2 remote processing system, a method of displaying information describing a
- 3 state of communication of data between the first and second processing
- 4 systems, the method comprising the steps of:
- 5 displaying an object on a display device, the object having a first
- 6 portion and a second portion;

7	causing a visually perceivable change to the first portion of the object to
8	indicate that a communication link has been established between the first and
9	second processing systems; and
10	causing a visually perceivable change to the second portion of the
11	object to indicate a degree of completeness of a communication between the
12	first and second processing systems.
1	38. In a first processing system connected to communicate with a second
2	processing system over a network, a method of displaying information about
3	a download from the second processing system to the first processing system,
4	the method comprising the steps of:
5	displaying a substantially circular object on a display device, the object
6	having a substantially circular section, the object further having a
7	substantially ring-shaped periphery section enclosing the substantially
8	circular section;
9	displaying a color band which moves about the periphery section to
10	indicate that communication has been established between the first and
11	second processing systems; and
12	progressively filling in the substantially circular section with a color to
13	indicate a degree of completeness of the download.
1	39. A method of generating a user interface in a processing system
2	connectable to a display device, the method comprising the steps of:
3	displaying a first window on the display device; and

- 4 displaying a second window on the display device such that the first
- 5 and second windows appear to move along a common axis.
- 1 40. A method according to claim 39, wherein the step of displaying the second
- 2 window on the display device comprises the step of displaying the second
- 3 window on the display device to create a visual effect of the first window
- 4 being pushed aside by the second window.
- 1 41. A method according to claim 40, wherein the display device comprises a
- 2 television set, and wherein the method is implemented in a set-top box for
- 3 enabling a user to access a wide area network using the television set as the
- 4 display device.
- 1 42. A method according to claim 39, wherein the first and second windows
- 2 are input windows.
- 1 43. A method according to claim 39, wherein the step of displaying the second
- 2 window on the display device is in response to a user input.
- 1 44. A method of generating a user interface in a processing system
- 2 connectable to a television set, the processing system for enabling a user to
- 3 access a wide area computer network using the television set as a display
- 4 device, the television set having a display area, the method comprising the
- 5 steps of:

6	displaying an input field in a first portion of the display area of the
7	television set, the input field for allowing the user to enter characters to
8	specify a function of the processing system which the user wishes to access
9	and
10	displaying a menu in a second portion of the display area while
11	displaying the input field, the menu specifying functions of the processing
12	system.

- 45. A method according to claim 44, wherein the input field is further for 1
- 2 allowing a user to enter characters corresponding to an address on the wide
- 3 area computer network, the address for causing the processing system to
- communication with a remote processing system corresponding to the 4
- 5 address.
- 46. A method according to claim 45, wherein the input field is further for
- 2 allowing a user to enter characters specifying a hypertext link.